Govt. II-7-G.O.S.-10-11-31.

L.S.G. (1932) Department.

Ms SERIES.

G.O. No. 415 P.H.

DATED 27-2-32

[Despatch Abstract.]

Inspection Notes -

Mangalore Water Supply and Drainage Schemes etc. -

Sanitary Engineer's report - Recorded.

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Inspection Notes
on
Mangalore Water Supply and
Drainage Schemes and
Night Soil Disposal.

by

G.V. Rao Esq.,B.Sc.,A.M.I.C.E.,
Sanitary Engineer to Govt.,Madras.

Date of Inspection.-11-11-1931.

Water Supply.

The soil and sub-soil of the town consist mainly of gravel and laterite. These being very porous allow easy soakage of water underground. The sullage of houses mostly soaks in their back-yards and the few drains that are constructed in the town have not got impervious bottoms. Soakage of sullage and sewage contaminates the wells which are the chief source of potable supply to the town and the wide prevalence of waterborne epidemics like typhoid, cholera and of bowel diseases, is clear evidence thereof. A protected water supply to the town from the Nassamar valley about 7 miles off was investigated some years back and a preliminary report outlining a scheme estimated to cost about 7.4 lakhs to instal and Rs.4500 to maintain was referred to the Municipal Council in Government Memo No. 23383-1-D2 P.H.dated 18-6-28 for its remarks as to how it proposed to finance the scheme. The Council has not yet come to

any decision in this matter. In this scheme the idea was to use cast iron pipes for the long gravitation main about 40,000' long from the Hassamar Valley to the Service Reservoir in the town. By adopting Hume reinforced concrete pipes tested to 100 lbs. pressure, the cost of the scheme can be reduced by about 1.5 lakhs. In view of the importance of the subject and of the fact that for the conditions obtaining at Mangalore a comprehensive scheme of protected water supply is more urgent than even a drainage scheme the Council would be well advised to decide on such a scheme without further delay.

Drainage.

As remarked above, the soil and sub-soil of Mangalore is so porous and the configuration of the country so favourable that rain water drains off easily and there is no visible stagnation or water logging anywhere, even with rainfall in some years so heavy as 150". The natural drainage outlet for the town is the Ghurupur river which here is subject to tidal action. The town generally looks clean. However as part of the sullage and sewage from houses

soaks in the backyards, polluting the wells and as part runs into the Ghurupur River through the drains already constructed, affecting the fish in the sea closeby, a scientific system of drainage for the town intercepting also its flow into the river is badly wanted. The Port authorities contemplate, it seems, extending the wharf towards the north and dumping sullage in any quantity in the river here would be objectionable. An investigation for a scheme of Partial Drainage for the congested areas of the town (with a population of about 31000 - the population of the entire town as per census of 1931 being 66119) was sanctioned in G.O. No. 1205 P.H., dated 7-5-29 and the Council has also provided funds for a special staff to draw up the scheme. The outdoor work connected with the investigation has been completed by the Deputy Sanitary Engineer, Southern Circle and on receipt of the investigation plans and report from the Deputy Sanitary Engineer, the preparation of the scheme will be taken up.

It is proposed to pump the town sullage on to a sewage farm to be located about 2½ miles to the north of the town in a portion of the area which is at present being used as a

trenching ground. The soil is suitable for a sewage farm. When the drainage works come into operation the question of disposal of night soil can also be solved by diluting the night soil in dumping pits and treating it along with the town sullage on settlement tanks, percolating filters and sewage farm.

Disposal of Night Soil. The night soil is at present disposed of on the trenching ground referred to above. The soil is quite suited to the purpose and there is no need at present to supplant it by any system of disposal by settlement tanks and percolating filters or septic tanks. In the meantime an alternative method would seem to be worth a trial. The town refuse is at present being dumped on the Beach Road causing no little nuisance. This refuse might also be transported to the trenching ground, and spread out in heaps say 60' x 40' x 3' on a level stretch of ground. 'V' shaped channels about 18" deep should be formed in these heaps and night soil deposited in these channels and covered with refuse. After a few days some water should be sprinkled on these heaps and the mixture turned over well with rakes. In the course of 6 to 8 weeks this

turns into a good marketable manure. This treatment is successfully adopted at Mysore and would solve the problem both of town refuse and night soil.

23 NOV 1931

G.U.Rao 27/11/31.
Sanitary Engineer to Govt.

513-G 8/28.11.31.

Forwarded to the Secretary to Govt.,Local Self Govt.Dept.
Director of Public Health.
Chairman, Municipal Council,Mangalore.
Deputy Sanitary Engineer,Southern Circle.

DSR/26-11-31). 26.11.

L SG (Pth) Deptt

CM 49065 from the San Engr No 513-G d 28.11.31

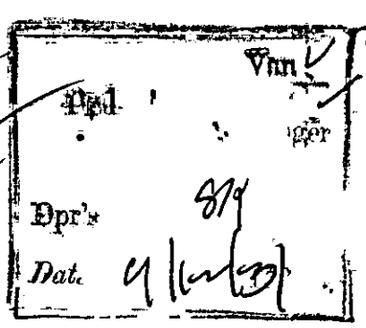
Subject—

Inspection Notes – Mangalore Water Subbly and Drainage Schemes etc.

Memo No 49065-1E Pth d 8.12.31

The C.M.C. Mangalore is requested to expedite the submission of his remarks on the Inspection Notes of the San Engr referred to above.

To
The C.M.C. Mangalore
The San Engr.



Read 2/1/32

O. F. 93—10-9 28.

Local Self Govt DEPARTMENT. 6764 Cno. 1034/31-32.

Public Health Branch.

REMINDER. **REPLY.**

To THE Chairman, Municipal Council - Mangalore

To THE Secretary to the Government of Madras, Local Self Government Department

The undersigned ~~has the honour to invite~~ is directed to invite ~~its~~ attention to the communication noted in the margin and to request that this reminder may be returned ~~at once~~ with information as to—

No. 49045-F1/F1 dated 4.12.31

17 Sir 1932

(1) the stage at which the matter now is,

(2) the date by which a reply may be expected, ~~and~~

~~(3) the circumstances which have caused the delay.~~

2. It is requested that the reply to this reminder may be sent ~~not later than~~ within a week from the date of its receipt.

The council has decided to consider the water supply and drainage schemes when funds are available.

Regarding the disposal of night soil and street rubbish the suggestion of the Sanitary Engineer has been ---- accepted and necessary steps will be taken in the matter.

Your obedient servant

Chairman, M.C.

Office Sec. to G. S.-G

Station Fort St George

Dated 8/1/32

Signature. For Deputy Sec. to Govt. 1/2

Designation.

SUBJECT.

Protection Works - Mangalore W.S. & Drainage Schemes

Secrt. 11-b (a)

When received for Fair-copying. Date 2/2/32 Initials.
When copied .. ..
When examined .. 52
When signed .. 52
When despatched .. 17841

L.SG(PH) DEPARTMENT.

Inspection Notes - Mangalore water Supply and Drainage Schemes etc - Sanitary Engineers Report. Recorded

READ AGAIN G.O. No. ..... dated ..... 19 .

" " " " ..... " ..... 19 .

READ ALSO:—

C. No. 49045 From the San'y Eng'r, No. 513-G, dated 28-1- 1932.

" " 6564 " " C.M.C. Mangalore " 1034/21-32 " 16/2 1932

" " ..... " " ..... " ..... " ..... 19 .

Van / Post / ger

ORDER.

No. 415-PH, dated 27-2- 1932

Dpt'd. 29/2/32

Date

To

San'y Eng'r, the C.M.C. Mangalore

Recorded.

19/2/32

Note

May issue after perusal and return by the San'y Eng'r.

19/2/32

22-G
24th FEB 1932

GOVERNMENT OF MADRAS

26 FEB 1932

L.B.

SG'r 49045-2 E, PH
22-2-32

96G
25.2.32

Perused and returned

24/2/32.
S.E

Dept (Proj) Dept

The order may now issue